

### Watson-Stillman Outside Pump Hydraulic Jacks



This type of jack is used extensively by contractors, builders, dry dock and wrecking companies, machine shops, and on oil fields for raising drive pipe and casings.

The double plunger pump has a compact arrangement of two plungers working on the same axis. They can be operated singly or together by merely throwing a clutch in or out. The large plunger has an area four times that of the smaller one.

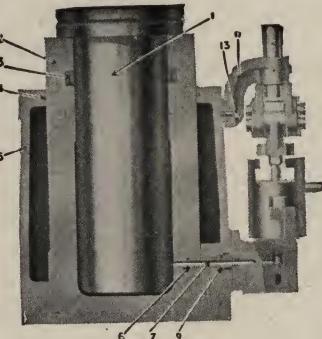
The cylinder is made of cast steel, the ram of semi-steel, and the cistern of cast iron. No stress whatever is put upon the cistern.

A boot of leather or canvas may be tied to ram head groove to protect ram from dirt when necessary.

Cap. Tons	Maximum Rise Inches	Height Over All Inches	Diameter of Base Inches	*Cylinder U Packing Inches	Weight Pounds
60	12	\$325.00	20 $\frac{1}{2}$	12	380
60	18	345.00	26 $\frac{1}{2}$	12	495
100	12	345.00	20 $\frac{1}{2}$	13	480
100	18	365.00	26 $\frac{1}{2}$	13	565
125	12	405.00	21 $\frac{1}{2}$	14	614x7 $\frac{3}{8}$
125	18	435.00	27 $\frac{1}{2}$	14	6 $\frac{1}{4}$ x7 $\frac{3}{8}$
150	12	510.00	22 $\frac{1}{2}$	15	7 $\frac{1}{8}$ x8 $\frac{1}{8}$
150	18	540.00	28 $\frac{1}{2}$	15	7 $\frac{1}{8}$ x8 $\frac{1}{8}$
200	18	640.00	30 $\frac{1}{2}$	18 $\frac{1}{2}$	1530

\*With hemp.

#### Parts



Capacity.....tons	60	60	100	100
Rise.....in.	12	18	12	18
1. Ram.....ea.	\$50.00	\$55.00	\$60.00	\$70.00
2. Cylinder.....ea.	150.00	170.00	170.00	210.00
3. Cylinder U Packing.....ea.	3.50	3.50	4.19	4.19
4. Large Cistern Leather Pkg. 1/4-In. Sq. per ft.	.20	.20	.20	.20
5. Cistern.....ea.	45.00	50.00	50.00	55.00

Capacity.....tons	125	125	150	150	200
Rise.....in.	12	18	12	18	18
1. Ram.....ea.	\$75.00	\$85.00	\$95.00	\$115.00	\$175.00
2. Cylinder.....ea.	250.00	300.00	325.00	400.00	500.00
3. Cyl. U Packing.....ea.	5.86	5.86	6.52	6.52	7.95
4. Large Cistern Lea. Pkg. 1/4-In. Sq. per ft.	.20	.20	.20	.20	.20
5. Cistern.....ea.	60.00	70.00	75.00	90.00	135.00

6. Press Nipple Washer, 3/4x5/16x3/16 Inch.....each	\$0.03
7. Pressure Nipple.....each	3.00
8. Suction Nipple.....each	.60
9. Press Nipple Washer, 1x3/4x3/16 Inch.....each	.03
10. Filling Screw.....each	.20
11. Piston Guide Bracket.....each	7.50
12. Handles.....per pair	2.00
13. 1/2-Inch Studs.....each	.20

### Duff-Norton Genuine Barrett Jacks

Trip and Automatic Lowering Capacity, 15 Tons—Double Acting



No. 1-D



No. 110

No. 1-D is a trip jack with hook trip; action is quick and positive.

Nos. 1-A and 6-A have the regular trip; a simple device which assures safe, quick, easy tripping.

No. 110 is a trip and automatic lowering jack. Can lift loads, lower loads gradually, or trip or drop loads from any elevation in its range.

Furnished with square socket lever to fit lining bar. Add \$1.00 to price if round socket lever and wood handle are desired.

No.....	*1-D	*1-A	*6-A	*110
Each.....	\$28.00	28.00	36.00	28.00
Height.....inches	22	22	28	22
Raise.....inches	13	13	19	13
Weight.....pounds	60	58	73	59

\*Raises on upward or downward stroke.

†Fitted with automatic lowering device.

### Duff-Norton Genuine Barrett Automatic Lowering Jacks



No. 1022



No. 1528

These jacks are widely used by industrial concerns, telephone and telegraph companies, street railway companies, steam railroads, mines, mills, contractors, truckmen, etc.

Automatic lowering jacks are ratcheted up or down, notch by notch, the direction being reversed by shifting the locking device at the side of the frame.

Nos. 1017 and 1020 furnished with single round sockets and 4-foot steel operating lever. No. 1022 is regularly furnished with double socket.

Nos. 1522, 1528, 2028 furnished with single socket and steel operating lever, but double socket can be furnished if desired.

No.....	1017	1020	1022	1522	1528	2028
Each.....	\$28.00	32.00	32.00	50.00	52.00	58.00
Capacity tons.	10	10	10	15	15	20
Height.....in.	17	20	22	22	28	28
Raise.....in.	9	11 $\frac{1}{2}$	12	11 $\frac{1}{2}$	18	18
Weight.....lb.	53	56	63	77	96	98

**Duff-Norton Bell Bottom Jack Screws**

Load centers on a full complement of chrome molybdenum steel balls, rotating in a machine-cut, grease-packed channel, reducing friction to a minimum.

Unbreakable, drop forged steel top grips the load with deep, sharp serrations.

One-piece solid steel screw with forged head; handles its rated capacity quickly and easily.

Extra heavy base double ribbed at throat, solid all the way around; not weakened by openings.

As a result of greatly reduced friction, a minimum amount of manual effort is required to lift a load.

Conform to S.P.R. 97-30 issued by the U.S. Department of Commerce, Simplified Practice Division.

Size Screw & Ht. Stand In.	*Each	5-Ton Capacity				
		Special Operating Lever Each	Height Overall Closed Inches	Height Overall Extended Inches	Wt. Lb.	
1 x 6	\$2.60	....	8½	12¾	6	
		10-Ton Capacity				
1½x4	\$2.90	\$ .60	6¾	8¾	6½	
1½x6	3.10	.60	8¾	12½	9	
1½x8	3.40	.60	10¾	16¼	11	
1½x10	3.80	.60	12¾	20½	13	
		12-Ton Capacity				
1½x6	3.75	\$ .80	8¾	12½	10½	
1½x8	4.25	.80	10¾	15¾	14	
1½x10	4.75	.80	12¾	20¾	15	
1½x12	5.25	.80	14¾	23¾	19	
		16-Ton Capacity				
1¾x8	5.00	\$1.00	11½	17	17	
1¾x10	5.75	1.00	13½	21	21½	
1¾x12	6.25	1.00	15½	24½	24½	
		20-Ton Capacity				
2 x 6	5.25	\$1.60	9¾	12¾	18	
2 x 8	6.00	1.60	11¾	16¾	21	
2 x 10	6.75	1.60	13¾	20¾	25	
2 x 12	7.50	1.60	15¾	24¾	29	
2 x 14	8.25	1.60	17¾	28¾	32½	
		24-Ton Capacity				
2½x6	\$7.75	\$2.40	11	13½	36	
2½x8	8.75	2.40	13	17½	41	
2½x12	10.75	2.40	17	25½	51½	
2½x14	12.00	2.40	19	29½	58½	
2½x16	13.25	2.40	21	33½	67	
2½x18	14.50	2.40	23	37½	72	
		30-Ton Capacity				
3 x 8	\$17.50	\$3.20	13	17	50	
3 x 14	19.50	3.20	19	28	73	
3 x 18	22.00	3.20	23	36	86	
3 x 24	25.75	3.20	29	48	128	

\*Not including lever bar.

†Operating levers furnished with jack on request.

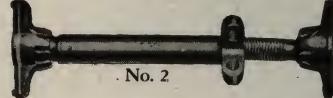
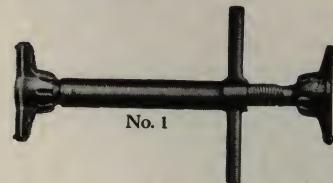
**Duff-Norton Self-Lowering Speed-Controlled Inverted Type Jacks****75 and 100-Ton Capacity**

For lifting locomotives and all purposes where small head with heavy lifting capacity is required.

Standard is semi-keyed, permitting it to be quickly turned up or down by hand. Lubrication is automatic.

Diameter of base, 14 inches.

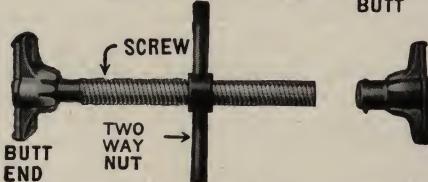
No.	Each	Cap. Tons	Ht. In.	Rise In.	Wt. Lb.
7263C	\$444.00	75	26	14	383
1243C	475.00	100	24	11½	404
1263C	475.00	100	26	13½	411

**Duff-Norton Extensible Steel Trench Braces**

Regularly furnished with 2-way lever nut (No. 1) but can be furnished with 3-way nut (No. 2) if desired. The two-way lever nut provides great strength and safeguards against bending or breaking. The 3-way nut is advantageous when working in close quarters.

Ball and socket joint at each end permits easy adjustment to any angle. Easily adapted to any width trench by using longer or shorter lengths of pipe.

No.	Per Dozen	Pipe and Screw Diam. Inches	Length of Brace Closed Inches	Length of Screw Inches	Safe Extension of Screw Inches	Weight Pounds per Dozen
1001	\$46.00	1½	16	10	6	180
1002	46.00	1½	18	12	7	200
1003	48.00	1½	21	14	8	212
1004	48.00	1½	24	14	8	221
1005	52.00	1½	27	16	9	240
1006	52.00	1½	30	16	9	247
1007	54.00	1½	36	18	10	273
1008	56.00	1½	42	18	10	300
1009	58.00	1½	48	18	10	325
1011	102.00	2	36	18	10	538
1012	104.00	2	42	18	10	564
1013	106.00	2	48	18	10	580
1014	108.00	2	54	18	10	608
1015	110.00	2	60	18	10	630

**Duff-Norton Extensible Steel Trench Brace Fittings SOCKET BUTT**

Without pipe. Adding pipe makes brace complete.

No.	Complete per Doz.	Socket Butts per Doz.	Diam. Screw Inches	Length Screw Inches	Ext. of Screw, In.	Wt. Lb. per Doz.
C-14	\$40.00	\$10.00	1½	10	6	168
C-15	40.00	10.00	1½	12	7	174
C-16	42.00	10.00	1½	14	8	180
C-17	44.00	10.00	1½	16	9	186
C-18	46.00	10.00	1½	18	10	192
C-19	90.00	24.00	2	18	10	438

**Duff-Norton Jack Handles**  
No. 518 Steel Jack Handles

No. 518 ..... each \$1.75

**No. 519 Wood Jack Handles**

No. 519 ..... each \$2.00

**MATERIAL NOT LISTED**

We can furnish practically everything used in mill, factory, or shop.

Please send us all of your inquiries.